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### TREATY

REC'D 2 3 NOV 2005

# INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

	ucie 30 and Rule 70)				
Applicant's or agent's file reference					
IEC040029PCT FOR FURTH	ER ACTION	See Form PCT/IPEA/416			
International application No.  International fili	ng date (day/month/year)	Priority date (day/month/year)			
	1. 2004 (02.07.04)	03.Jul. 2003 (03.07.03)			
International Patent Classification (IPC) or national classifica	tion and IPC				
IPC <sup>7</sup> C07H 17/07, A61K 31/7048, A61P 9/10, A61P	3/10, A61P 25/32				
Applicant					
INSTITUTE OF RADIATION MEDICINE, AC	ADEMY OF MILITARY M	EDICAL SCIENCES, PLA ET AL.			
1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.					
2. This REPORT consists of a total of 3 sheets, including this cover sheet.					
3. This report is also accompanied by ANNEXES, compris		dits cover sheet.			
	_				
a. (sent to the applicant and to the International E	Bureau) a total of	sheets, as follows:			
sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).					
sheets which supersede earlier sheets, but	which this Authority consid	lers contain an amendment that goes beyond			
Box.	tion as filed, as indicated in	item 4 of Box No. I and the Supplemental			
b. [ (sent to the International Bureau only) a	total of (indicate type and	number of electronic			
containing a sequence listing and/or tables rela	ted thereto, in electronic for	n only as indicated in the Sumplement D			
	of the Administrative Instruc	tions).			
4. This report contains indications relating to the following	g items:				
Zusis of the report	Box No. I Basis of the report				
☐ Box No. II Priority	Box No. II Priority				
	Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability				
Box No. IV Lack of unity of invention					
Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;					
citations and explanations supporting such statement					
Box No. VI Certain documents cited					
☐ Box No. VII Certain defects in the international	Box No. VII Certain defects in the international application				
Box No. VIII Certain observations on the intern	ational application				
Date of submission of the demand	Date of completion of	Date of completion of this report			
01. Jan 2005 (01.01) 2005)		12. Oct. 2005 (12.10.2005)			
Name and mailing address of the IPEA/CN	Authorized officer				
The State Intellectual Property Office, the P.R.China,		Xu chi			
6 Xitucheng Rd., Jimen Bridge, Haidian District, Beijing, Ch 100088	ina				
Facsimile No. 86-10-62019451	Telephone No. (86-1	10)62085562			
OFM PCT/IDE A /AOO (-		,			

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No. PCT/CN2004/000728

Вох	No.	I Basis of the repo	rt	
1.	Witl	regard to the languag	e, this report is based on:	
İ	$\boxtimes$		olication in the language in which it was filed	
				thich is the leaves and
		translation furnished		hich is the language of a
		<u> </u>	ch (Rules 12.3(a) and 23.1(b))	
			international application (Rule 12.4(a))	
		<u> </u>	• • •	
			iminary examination (Rules 55.2(a) and/or 55.3(a))	
2.	to ti	n regard to the element se receiving Office in re exed to this report):	ts of the international application, this report is based on (replacement esponse to an invitation under Article 14 are referred to in this report	sheets which have been furnished as "originally filed" and are not
	$\boxtimes$	the international appl	ication as originally filed/furnished	
		the description:		
		pages		as originally filed/furnished
		pages *	received by this Authority on	or Smarty moderationed
		pages *	received by this Authority on	
		41 4 .		
		the claims:		
		pages		as originally filed/furnished
		pages *	as amended (together wi	ith any statement)under Article 19
		pages *	received by this Authority on	
		pages	received by this Authority on	
		the drawings:		
		pages		
		pages *	received by this Authority on	as originally filed/furnished
		pages *	received by this Authority on	
	<u>_</u> _		received by this Authority on	
		sequence listing and/	or any related table(s) - see Supplemental Box Relating to Sequence L	isting.
3. [	┙'	The amendments have	resulted in the cancellation of:	
		☐ the description,	pages	
		the claims, Nos		
		the drawings, sl		
		the sequence lis		
			ated to sequence listing (specify):	<del></del>
				<del></del>
4.	r	his report has been est	ablished as if (some of) the amendments annexed to this report and lis	. 11 1 1 1
		since they have been c	onsidered to go beyond the disclosure as filed, as indicated in the Sup	sted below had not been made,
				plemental Box (Rule 70.2(c)).
		ine description,	pages	
		Li the claims, 1405.		
		the drawings, sh		
		the sequence lis		
*	<i>1</i> .		ted to sequence listing (specify):	
<b>₹</b>	If it	em 4 applies, some or	all of those sheets may be marked "superseded."	
0 T				

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No. PCT/CN2004/000728

Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement		
Statement:		
Novelty (N)	Claims 1-8	YES
	Claims	NO
Inventive step (IS)	Claims 1-8	YES
	Claims	NO
Industrial applicability (IA)	Claims 1-8	YES
	Claims	NO
- ( •	Statement: Novelty (N)  Inventive step (IS)	Statement:  Novelty (N)  Claims  Claims  Inventive step (IS)  Claims  Claims  1-8  Claims  Industrial applicability (IA)  Claims  1-8

#### Citations and explanations (Rule 70.7)

The following documents have been cited herein:

Document1: Yang Ruolin, et al., Journal of China Pharmaceutical University, 1999, Vol.30, No.2, p81-85

Document2: HOU Dian jie, et al., Chinese Journal of Medicinal Chemistry, 2002, Apr., Vol.12, No. 2, p103-104

Document3: CN1394603A

Documents 1-3 described puerarin derivatives, such as alkyl ester and ether of puerarin. However, the derivatives disclosed in the above documents are not included in general formula (I) set forth as claim 1 of this application. Moreover, D1-3 neither teach nor suggest the compounds of the claim 1 having alkylaminoalkoxyl substituents and the use thereof.

Thus, claim 1 is novel and not obvious from the description in those documents, meeting the criteria of novelty step set out in PCT Article 33(2) and inventive step set out in PCT Article 33(3).

In term of above, claims 2-8 meet the criteria of novelty set out in PCT Article 33(2) and inventive step set out in PCT Article 33(3).

Claims 1-8 meet the criteria of Industrial applicability set out in PCT Article 33(4).

Form PCT/IPEA/409 (Box No.V)(April 2005)

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